



## Telephone Survey: Public Tendencies in Emergency Response

Regulatory Information Conference  
March 10, 2009

R. L. Sullivan, NSIR

---

---

---

---

---

---

---

---



### Background

- NRC has statutory responsibility for the radiological health and safety of the public.
- Evacuation of nuclear plant Emergency Planning Zones (EPZs) is one element of the array of protective actions.
- Study was conducted (March 2008) to assess public tendencies with respect to implementing protective action strategies.

2

---

---

---

---

---

---

---

---



### Background

- NRC is revising guidance on protective actions
- Some evacuations within nuclear plant Emergency Planning Zones (EPZs) in recent years, but none were radiological
- Survey developed by Sandia National Laboratories
- Also gathered data on:
  - Public information programs
  - Planning for special needs population
  - Shadow evacuation
  - Planning for school evacuations

3

---

---

---

---

---

---

---

---



### Methodology

- Random sample across nuclear plant EPZs (821 respondents)
- No minimum quotas per plant
- Data is national level and not specific to any plant or state
- Interviews conducted by telephone.

4

---

---

---

---

---

---

---

---



### Methodology

- Survey sample at least 45% male for gender balance
- Participants at least 18 years of age
- Nuclear electric co. employee households not included
- Public very willing to answer survey questions – average time 16 minutes

5

---

---

---

---

---

---

---

---



### Summary of Survey

- How informed are you about what to do if the sirens for the nuclear plant are sounded?
  - 60% well informed
- Have you ever received any EP information such as..... ?
  - 78% recalled receiving information
- Did the information that you received... provide information about:
  - Evacuation Yes 66%;
  - What to do if you hear sirens Yes, 62%;
  - Sheltering - Yes 52%

6

---

---

---

---

---

---

---

---



### Summary of Survey

- How familiar are you with the evacuation plan? -54% familiar
- How likely...you would follow evacuation instructions? - 81% would follow
- How likely... you would follow shelter in place instructions? - 75% would shelter

7

---

---

---

---

---

---

---

---



### Summary of Survey

- In a staged evacuation would you follow instructions and shelter until it is your turn to evacuate?
  - 72% would shelter
- Would you evacuate if told that other areas were evacuating but your area is not in danger?
  - 60% would evacuate

8

---

---

---

---

---

---

---

---



### Special Needs

- Would you or a family member require assistance...to... evacuate?
  - 8% need help
- Have you registered with your county...your need for assistance?
  - 29% have registered

9

---

---

---

---

---

---

---

---



### Special Needs

- Why have you not registered...? (n=48)
  - 42% Did not know they could register
  - 31% Did not know that assistance would be available
  - 29% Did not know how to register
  - 29% Have not taken the time to register
  - 25% Believe they could evacuate...if they had to
  - 10% Do not think that an evacuation... is ever likely
  - 8% Do not want to provide personal information...

10

---

---

---

---

---

---

---

---



### Conclusions

- EPZ population relatively well informed
- Public will follow staged evacuation direction sufficiently to support strategy (given proper message)
- Public will shelter if asked
- Preparedness for special needs people not in special facilities should be improved

11

---

---

---

---

---

---

---

---



### Next Steps

- Revise NUREG 0654 Supp. 3
  - PAR Logic Diagram
- Coordinate with FEMA on special needs population not in special facilities

12

---

---

---

---

---

---

---

---



**Questions?**

Full study at:  
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/contract/cr6953/>

Randy Sullivan  
[randy.sullivan@nrc.gov](mailto:randy.sullivan@nrc.gov)  
(301) 415-1123

13

---

---

---

---

---

---

---

---